ABSTRACT OF THE DISCLOSURE

The present invention relates to a method and an apparatus for serial data communication, the method comprises a data transmission process which transmits data from one control unit to the another control unit and at the same time checks a reception confirmation signal on each number of the data by transmitting a clock signal, and a data reception process which receives the data on the one control unit from the other control unit and checks a transmission confirmation signal on the each number of the data by transmitting the clock signal. The apparatus comprises a first and a second control unit for transmitting the data with a data transmission start signal at data transmission mode, transmitting the data repeatedly while feedback-receiving a data transmission permission signal and a reception confirmation signal, and transmitting the data reception confirmation signal and the data transmission permission signal to the other control unit at data reception mode, four serial buses for performing serial data communication between the both control units, two pull-up operation units for continuing control voltage of the serial buses at a certain level, and a control voltage matching unit for continuing voltage equilibrium condition by muting excessive voltage at grounding side when control voltage level do not coincide with the serial bus due to an operation voltage difference of the pull-up operation units.